

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF

JUN 25 . 25

(AE-17J)

# CERTIFIED MAIL RETURN RECEIPT REQUESTED

John Bassett, Plant Manager Chicago Carbon Company 12308 South New Avenue Lemont, Illinois 60439

> Re: Notice of Violation Finding of Violation Chicago Carbon Company Lemont, Illinois

Dear Mr. Bassett:

The United States Environmental Protection Agency ("U.S. EPA") is issuing the enclosed Notice of Violation ("NOV") / and Finding of Violation ("FOV") to Chicago Carbon Company ("Chicago Carbon" or "you"). The NOV/FOV is being issued under Section 113(a)(1) and (a)(3) of the Clean Air Act ("CAA"), 42 U.S.C. § 7413(a)(1) and (a)(3). We find that you are violating violating Parts C and D of the CAA, 42 U.S.C. §§ 7470 et seq. and §§ 7501 et seq.; Title V of the CAA Amendments of 1990, 42 U.S.C. §§ 7661 et seq.; Section 111 of the CAA, 42 U.S.C. § 7411; and the Illinois State Implementation Plan (SIP) at your Chicago, Illinois facility.

We have several enforcement options under Section 113(a)(1) and Section 113(a)(3) of the Clean Air Act, 42 U.S.C. § 7413(a)(1) and (a)(3). These options include issuing an administrative compliance order, issuing an administrative penalty order, and bringing a judicial civil or criminal action. The options we select may depend on, among other things, the length of time you take to achieve and demonstrate continuous compliance with the rules cited in the NOV/FOV.

We are offering you an opportunity to confer with us about the violations alleged in the NOV/FOV. The conference will give you the opportunity to present information on the specific findings of violation, the efforts you have taken to comply, and the steps you will take to prevent future violations.

Please plan for your facility's technical and management

personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The U.S. EPA contact in this matter is D.J. Law. You may call him at (312) 886-6024 to request a conference. You should make the request as soon as possible, but no later than 10 calendar days after you receive this letter. We should hold any conference within 30 calendar days of your receipt of this letter.

Sincerely yours,

Stephen Rothblatt, Director Air and Radiation Division

Enclosure

cc: Julie Armitage

Compliance and Enforcement Section

Illinois Environmental Protection Agency

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:	)	
	)	
Chicago Carbon Company Lemont, Illinois	) )	NOTICE OF VIOLATION AND FINDING OF VIOLATION
	)	EPA-5-05-IL-16
Proceedings Pursuant to	)	
Section 113(a)(1) and (a)(3)	)	
of the Clean Air Act, 42	)	
U.S.C. § 7413(a)(1) and	)	
(a) (3)	)	
	)	

#### NOTICE AND FINDING OF VIOLATION

The Administrator of the United States Environmental Protection Agency (U.S. EPA) is issuing this Notice of Violation and Finding of Violation under Section 113(a)(1) and (a)(3) of the Clean Air Act ("Act" or "CAA"), 42 U.S.C. § 7413(a)(1) and (a)(3). U.S. EPA finds that Chicago Carbon Company (Chicago Carbon) is violating Parts C and D of the CAA, 42 U.S.C. §§ 7470 et seq. and §§ 7501 et seq.; Title V of the CAA Amendments of 1990, 42 U.S.C. §§ 7661 et seq.; Section 111 of the CAA, 42 U.S.C. § 7411; and the Illinois State Implementation Plan (SIP)as follows:

#### STATUTORY AND REGULATORY BACKGROUND

#### New Source Review

1. Section 110(a)(2) and Parts C and D of Title I of the Clean Air Act require preconstruction review and permitting for modifications of stationary sources. Pursuant to applicable regulations, if a major stationary source is planning to make one or more major modifications, then that source must obtain either a Prevention of Significant Deterioration ("PSD") permit or a nonattainment New Source Review ("NSR") permit, depending on whether the source is located in an attainment or a nonattainment area for the pollutant being increased above the significance level. To obtain the required permit, the source must agree, among other things, to install the Best Available Control Technology ("BACT") for an attainment pollutant or achieve the Lowest Achievable Emission Rate ("LAER") in a nonattainment area.

## Prevention of Significant Deterioration

- 2. On June 19, 1978, U.S. EPA promulgated the prevention of significant deterioration of air quality standards pursuant to Subtitle I, Part C of the Act. These regulations are codified at 40 C.F.R. § 52:21 (43 Fed. Reg. 26403).
- 3. On April 7, 1980, U.S. EPA delegated to the Illinois Environmental Protection Agency (IEPA) authority to review and process PSD permit applications and to implement the PSD program. 46 Fed. Req. 9584.
- 4. On August 7, 1980, U.S. EPA incorporated the provisions of 40 C.F.R. § 52.21(b) through (w) into the Illinois SIP. 45 Fed. Req. 52741, as amended at 46 Fed. Req. 9584, codified at 40 C.F.R. § 52.738.
- 5. 40 C.F.R. § 52.21(b)(1)(i)(b) defines a "major stationary source" as any source which emits or has the potential to emit, 250 tons per year or more of any pollutant subject to the regulation under the Act.
- 6. 40 C.F.R. § 52.21(b)(2)(i)defines a "major modification" as any physical change in or change in the method of operation of a major stationary source that would result in a significant net emission increase of any pollutant subject to the regulations under the Act.
- 7. 40 C.F.R. § 52.21(b)(23)(i) defines "significant" net emissions increase for sulfur dioxide (SO<sub>2</sub>) as a rate of emissions which would equal or exceed 40 tons per year of SO<sub>2</sub>, for particulate matter (PM) as a rate of emissions which would equal or exceed 25 tons per year of PM, for ozone as a rate of emissions which would equal or exceed 40 tons per year of volatile organic compounds.
- 8. 40 C.F.R. § 52.21(i)(1) prohibits the actual construction of a major stationary source or major modification without a permit which provides that the major stationary source or modification will meet the requirements of 40 C.F.R. § 52.21 (j) through (r).
- 9. 40 C.F.R. § 52.21(j) provides that for each pollutant subject to regulation under the Act for which a major modification would result in a significant net emissions increase at the source, the owner or operator of the major modification shall apply BACT to each proposed emissions

- unit at which the increase would occur as the result of physical changes and changes in the methods of operation of the unit.
- 10. 40 C.F.R. § 52.21(r) states that any owner or operator of a source subject to PSD regulations who operates a source or modification without applying for and receiving approval under the PSD regulations is subject to enforcement action.

## Nonattainment New Source Review

- 11. Section 110(a)(2)(I) of the Act requires that each State Implementation Plan must meet the applicable requirements of Part D of the Act.
- 12. Section 173(a)(4) of the Act prohibits the issuance of a construction permit in a nonattainment area if the applicable implementation plan is not being adequately implemented.
- 13. On April 4, 1979, U.S. EPA prohibited construction of major modifications within nonattainment areas if, after June 30, 1979, the state SIP did not satisfy the requirements of Part D of the Act. This construction ban continued until after the state SIP met Part D requirements. 44 Fed. Reg. 20372, 20373.
- 14. On December 17, 1992, U.S. EPA approved the incorporation of the Illinois nonattainment NSR rules, 35 Illinois Administrative Code Part 203, into the Illinois SIP. 57 Fed. Reg. 59928 (effective February 16, 1993). On September 27, 1995, U.S. EPA approved a revision to the Illinois nonattainment NSR rule as part of the SIP. 60 Fed. Reg. 49778 (effective October 27, 1995).
- 15. The Illinois SIP prohibits the construction of a major modification that is major for a pollutant for which the area is designated as a nonattainment area without first, among other things, obtaining a permit, offsetting emissions and achieving LAER in accordance with 35 Ill. Admin. Code Part 203.
- 16. 35 Ill. Admin. Code § 203.207 defines "major modification" as a physical change, or change in method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant for which the area is designated a nonattainment area.

17. 35 Ill. Admin. Code § 203.2079 defines "significant" net emission increase in the pollutant emitted if the rate of emission is equal to or in excess of 40 tpy of volatile organic material or 25 tpy of PM.

#### New Source Performance Standards

- 18. 40 C.F.R. § 60.8(a) states that within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Administrator under Section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).
- 19. 40 C.F.R. § 60.13(a) states that all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under appendix B of this subpart.
- 20. 40 C.F.R. § 60.40(a)(1) states that the provisions of this subpart apply to each fossil-fuel-fired steam generating unit of more than 73 megawatts heat input rate (250 million Btu per hour).
- 21. 40 C.F.R. § 60.42(a)(1) states that no owner or operator of a source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which contain particulate matter in excess of 43 nanograms per joule heat input (0.10 lb per million Btu) derived from fossil fuel or fossil fuel and wood residue.
- 22. 40 C.F.R. § 60.43(a)(2) states that no owner or operator of a source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of 520 nanograms per joule heat input (1.2 lb per million Btu) derived from solid fossil fuel or solid fossil fuel and wood residue.
- 23. 40 C.F.R. § 60.44(a)(1) states that no owner or operator of a source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO<sub>2</sub> in excess of 86 nanograms per joule heat input (0.20)

1b per million Btu) derived from gaseous fossil fuel.

- 24. 40 C.F.R. § 60.44(a)(3) states that no owner or operator of a source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as  $NO_2$  in excess of 300 nanograms per joule heat input (0.70 lb per million Btu) derived from solid fossil fuel, or solid fossil fuel and wood residue (except lignite or a solid fossil fuel containing 25 percent, by weight, or more of coal refuse).
- 25. 40 C.F.R. § 60.45(a) states that each owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions, and either oxygen or carbon dioxide except as provided in paragraph (b) of this section.

## Title\_V

- 26. Section 502(a) of the Act, 42 U.S.C. § 7661a(a), and 40 C.F.R. § 70.7(b) provide that, after the effective date of any permit program approved or promulgated under Title V of the Act, no source subject to Title V may operate except in compliance with a Title V permit.
- 27. On March 7, 1995, U.S. EPA gave Illinois' Clean Air Act Permit Program interim approval as a 40 C.F.R. Part 70 permit program. 60 Fed. Reg. 12478. The program was granted full approval effective November 30, 2001. 40 C.F.R. Part 70, App. A.
- 28. Title V of the CAA, 40 C.F.R. Part 70, and Section 39.5.7 of the Illinois Environmental Protection Act apply to any major stationary source that directly emits or has the potential to emit 100 tons per year or more of any air pollutant.
- 29. Section 504(a) of the Act, 42 U.S.C. § 7661c(a), 40 C.F.R. § 70.6, and Section 39.5.7 of the Illinois Environmental Protection Act require that each Title V permit include, among other things, enforceable emission limitations and standards as are necessary to assure compliance with applicable requirements of the Act and the applicable SIP, including any PSD requirement to comply with an emission limit that meets BACT and any nonattainment NSR requirement to comply with an emission limit that meets LAER.

30. 40 C.F.R. § 70.5 and Section 39.5.5 of the Illinois Environmental Protection Act require that a source submit a complete permit application that, among other things, identifies all applicable requirements (including any requirement to meet BACT pursuant to PSD or to achieve LAER pursuant to nonattainment NSR), certifies compliance with all applicable requirements, and contains a compliance plan for all applicable requirements for which the source is not in compliance.

#### FACTUAL BACKGROUND

#### New Source Review

- 31. Chicago Carbon owns and operates a coke calcining facility located at 12308 S. New Avenue, Lemont, Illinois. The factual background and findings of this NOV and FOV regard this specific facility.
- 32. Chicago Carbon is located in the Village of Lemont, the Township of DuPage, the County of Will, in the State of Illinois.
- 33. Presently, the County of Will is an area designated as unclassifiable for the National Ambient Air Quality Standards ("NAAQS") for sulfur dioxide ("SO<sub>2</sub>"). 40 C.F.R. § 81.314.
- 34. Presently, the County of Will is an area designated as unclassifiable for the National Ambient Air Quality Standards ("NAAQS") for TSP. 40 C.F.R. § 81.314.
- 35. Presently, the County of Will is an area designated as severe nonattainment for the NAAQS for ozone  $(O_3)$ . 40 C.F.R. § 81.314.
- 36. In 1971 Chicago Carbon constructed its K-1 calcining unit. In 1978 Chicago Carbon constructed its K-2 calcining unit. The K-1 and K-2 calcining units emit, or have the potential to emit, at least 250 tons per year of SO<sub>2</sub>, TSP, and VOC.

#### Chicago Carbon Modified the K-2 Calcining Unit in 1983.

- 37. On or about November 2, 1983, the County of Will was in an area designated as attainment for ozone  $(0_3)$ .
- 38. On or about November 2, 1983, the County of Will, DuPage Township was in an area designated as nonattainment for

total suspended particulate (TSP).

- 39. On or about November 2, 1983, Chicago Carbon installed a preheater in its K-2 Calcining Unit, and removed tertiary air from its K-2 Calcining Unit, to facilitate its processing of needle coke.
- 40. The preheater in its K-2 Calcining Unit and the removal of tertiary air from its K-2 Calcining Unit caused a significant net emissions increase of total suspended particulates ("TSP") of 25 tons per year ("tpy") or more, and a significant net emissions increase of VOC of 40 tpy or more.

## Chicago Carbon Modified the K-1 Calcining Unit in 1998.

- 41. On or about July of 1998, the County of Will was in an area designated as unclassifiable for the NAAQS for sulfur dioxide ("SO<sub>2</sub>"). 40 C.F.R. § 81.314.
- 42. On or about July of 1998, Chicago Carbon replaced the economizer on the waste heat boiler of its K-1 Calcining Unit.
- 43. The economizer replacement caused a significant net emissions increase of  $SO_2$  of 40 tpy or more.

## New Source Performance Standards

- 44. 40 C.F.R. Part 60 Subpart D Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971, applies to fossil-fuel-fired steam generators with a design heat input of more than 250 MMBtu/hr.
- 45. Chicago Carbon installed its K-2 Calcining Unit after August 17, 1971.
- 46. The K-2 Calcining Unit combusts refinery fuel gas and petroleum coke to produce heat energy.
- 47. The K-2 Calcining Unit includes a waste heat boiler to produce steam for process use, as well as for sale.
- 48. The K-2 Calcining Unit has a total design heat input of 285.73 MMBtu/hr.
- 49. Chicago Carbon failed to demonstrate its compliance with 40

C.F.R. Part 60, Subpart D.

#### VIOLATIONS - NSR

## Chicago Carbon Company K-2 Calcining Unit

- 50. In or about 1983, Chicago Carbon's installation of a preheater and removal of tertiary air on the K-2 Calcining Unit was a physical change that resulted in a significant net emission increase of PM and/or VOC, and therefore was a major modification as defined in 40 C.F.R. § 52.21(b) and 35 Ill. Admin. Code Part 203.
- 51. Chicago Carbon's installation of the preheater and removal of tertiary air on the K-2 Calcining Unit violated U.S. EPA's prohibition on construction of major modifications within nonattainment areas located in states that did not have a state SIP that satisfied the requirements of Part D of the CAA, in violation of 40 C.F.R. § 52.24(a) (44 FR 38473) (July 2, 1979). See 44 Fed. Reg. 20372 (April 4, 1979).
- 52. Chicago Carbon's failure to, among other requirements, obtain a PSD permit and/or nonattainment NSR permit, install required pollution control equipment, and obtain required offsets prior to commencing the installation of the preheater and removal of tertiary air on the K-2 Calcining Unit is a violation of 40 C.F.R. § 52.21 and 35 Ill. Admin. Code Part 203.

## Chicago Carbon Company K-1 Calcining Unit

- 53. In or about 1998, Chicago Carbon's replacement of the economizer on the waste heat boiler of its K-1 Calcining Unit was a physical change that resulted in a significant net emission increase of  $SO_2$ , and therefore was a major modification as defined in 40 C.F.R. § 52.21(b), as incorporated into the Illinois SIP.
- 54. Chicago Carbon's failure to, among other requirements, obtain a PSD permit and install BACT prior to commencing replacement of the economizer on the waste heat boiler of its K-2 Calcining Unit is a violation of 40 C.F.R. § 52.21, as incorporated into the Illinois SIP.

#### VIOLATIONS - NSPS

## Chicago Carbon Company K-2 Calcining Unit

- 55. Chicago Carbon failed to conduct performance tests for its K-2 Calcining Unit, in violation of 40 C.F.R. § 60.8.
- 56. Chicago Carbon failed to comply with continuous monitoring system requirements for its K-2 Calcining Unit, in violation of 40 C.F.R. § 60.13.
- 57. Chicago Carbon failed to comply with the particulate emission limit for its K-2 Calcining Unit, in violation of 40 C.F.R. § 60.42.
- 58. Chicago Carbon failed to comply with the sulfur dioxide standards for its K-2 Calcining Unit, in violation of 40 C.F.R. § 60.43.
- 59. Chicago Carbon failed to comply with the nitrogen oxide standards for its K-2 Calcining Unit, in violation of 40 C.F.R. § 60.44.
- 60. Chicago Carbon failed to comply with the emission and fuel monitoring requirements for its K-2 Calcining Unit, in violation of 40 C.F.R. § 60.45.

## VIOLATIONS - TITLE V

## Chicago Carbon Company K-2 Calcining Unit

61. Chicago Carbon did not identify the nonattainment NSR and PSD provisions of the Act in its Title V Permit Application for its 1983 K-2 Preheater Project, and its 1998 K-1 Economizer Project. Furthermore, Chicago Carbon did not identify a compliance schedule nor certify compliance with those applicable requirements.

0/28/05 Date

Stephen Rothblatt, Director Air and Radiation Division

#### CERTIFICATE OF MAILING

I, Shanee Rucker, do hereby certify that a Request For Information Pursuant to the Clean Air Act was sent by Certified Mail, Return Receipt Requested, to:

John Bassett, Plant Manger Chicago Carbon Company 12308 South New Avenue Lemont, Illinois 60439

I also certify that I sent a copy of the Request For Information

Pursuant to the Clean Air Act was sent by First Class Mail to:

Julie Armatage, Acting Manager. Compliance and Enforcement Section Illinois Environmental Protection Agency 1021 North Grand Avenue East Springfield, Illinois 62702

on the <u>30</u> day of <u>June</u>, 2005.

Assistant

AECAS (MI/WI)

CERTIFIED MAIL RECEIPT NUMBER: 70010320000402931978